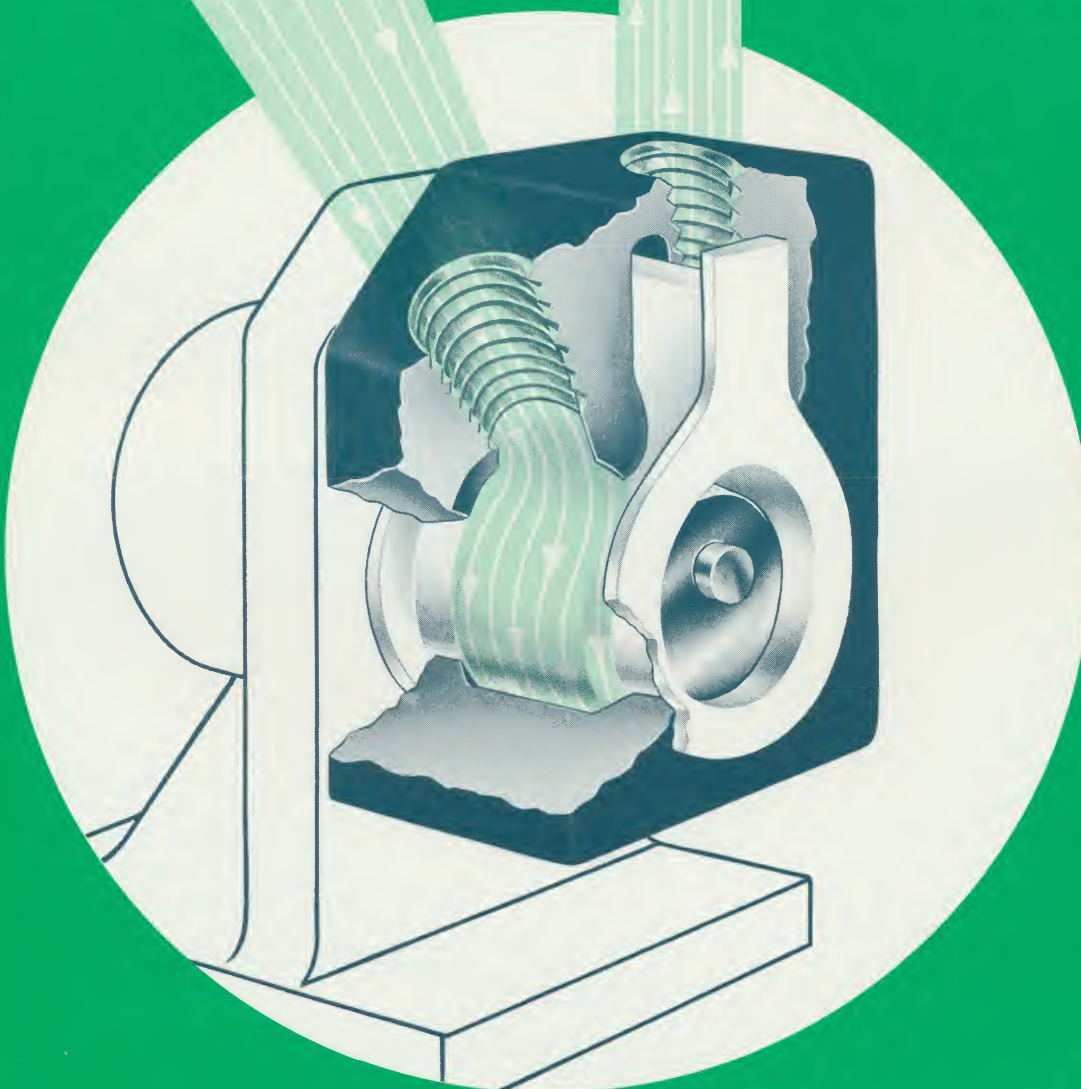


VANTON

FLEX-I-LINER

SEALLESS PLASTIC PUMPS



ENGINEERED FOR:

Corrosive
Chemicals

Abrasive
Slurries

Pharmaceuticals

Foodstuffs

Gases

Capacity
To 40 GPM

Discharge Pressure
To 50 PSIG

Temperature
To 300 °F.

FEATURES:

NO STUFFING BOXES, GLANDS OR SHAFT SEALS:

The single most serious problem with chemical pumps is stuffing box or shaft seal leakage. The design of the Vanton pump has eliminated the need for stuffing boxes, packing glands or mechanical shaft seals of any sort and, therefore, eliminated completely the possibility of hazardous and wasteful external leakage. Further, by so doing, the problem of contamination of the transferred fluid by oil or grease is avoided and a costly maintenance factor done away with. Abrasive slurries which would normally score shaft seals are readily handled by the flex-i-liner pump. Stuffing boxes or shaft seals are not necessary since flanges on the flex-i-liner straddle the body block and are pressed to its sides by concentric grooves in the bearing pedestal and cover plate. Thus the fluid is confined to a channel formed by the outer surface of the flex-i-liner and the inner surface of the body block while all mechanical action and moving parts are on the inside of the flex-i-liner.

NO CHECK VALVES OR GASKETS:

Internal valves are not necessary since the momentum of the fluid flow through the pump prevents back flow as the rotor hits the top of its stroke and crosses from discharge to suction. The absence of valves adds to the simplicity of construction and eliminates maintenance due to stickiness and valve wear. Sensitive fluids which might otherwise be damaged by opening and closing of check valves are readily handled by the flex-i-liner pump. Avoiding the use of gaskets further eliminates sources of leakage, maintenance and contamination.

SELF-PRIMING — WET OR DRY OPERATION:

Vanton flex-i-liner pumps can develop vacuums up to 26" Hg. and may handle gas, liquid or viscous fluids. The pump will prime itself in any operating position without the necessity of bothersome priming devices. Air bubbles will not cause locking or seizing of the pump nor impair efficiency. Running dry for extended periods is not detrimental to the pump.

NON AGITATING:

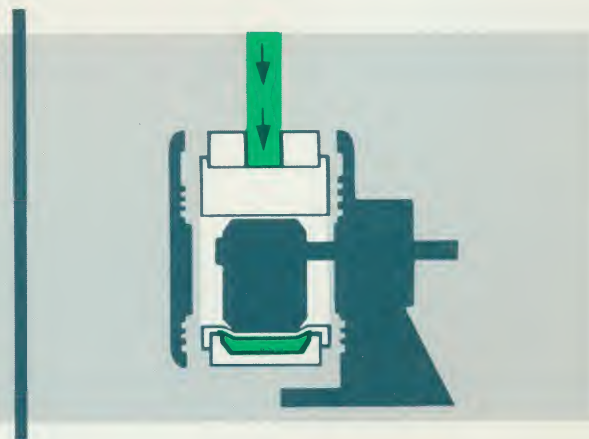
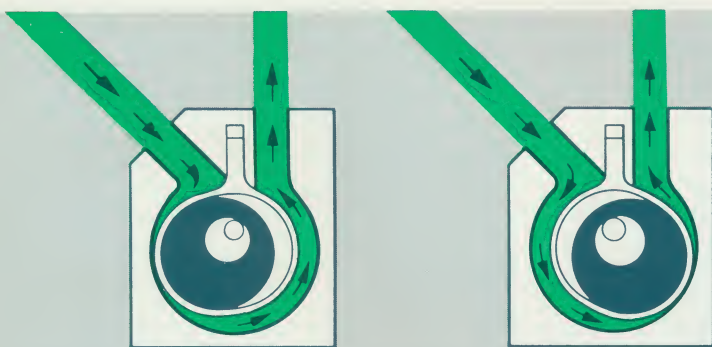
At selected R.P.M. depending on the fluid, the gentle pumping action prevents churning or foaming. This not only prevents excessive settling out of suspensions, but also avoids breakdown of various latex emulsions and other similar shear sensitive liquids.

EXTERNAL BEARINGS:

Both shaft bearings are housed in a cast iron pedestal which is external to the fluid cavity itself. Further, the rotor bearing is completely enclosed within the rotor and sealed off with a plug on one side and a synthetic bearing guard on the other. Bearings are sealed-in permanently lubricated ball bearings and operate in a clean isolated non-corrosive atmosphere.

LOW MAINTENANCE:

Flex-i-liner pumps, by eliminating stuffing boxes, shaft seals, gaskets and check valves; remove, by unique design alone, the major causes of pump maintenance. Further the only wearing part is the low cost flexible liner which can be replaced readily.



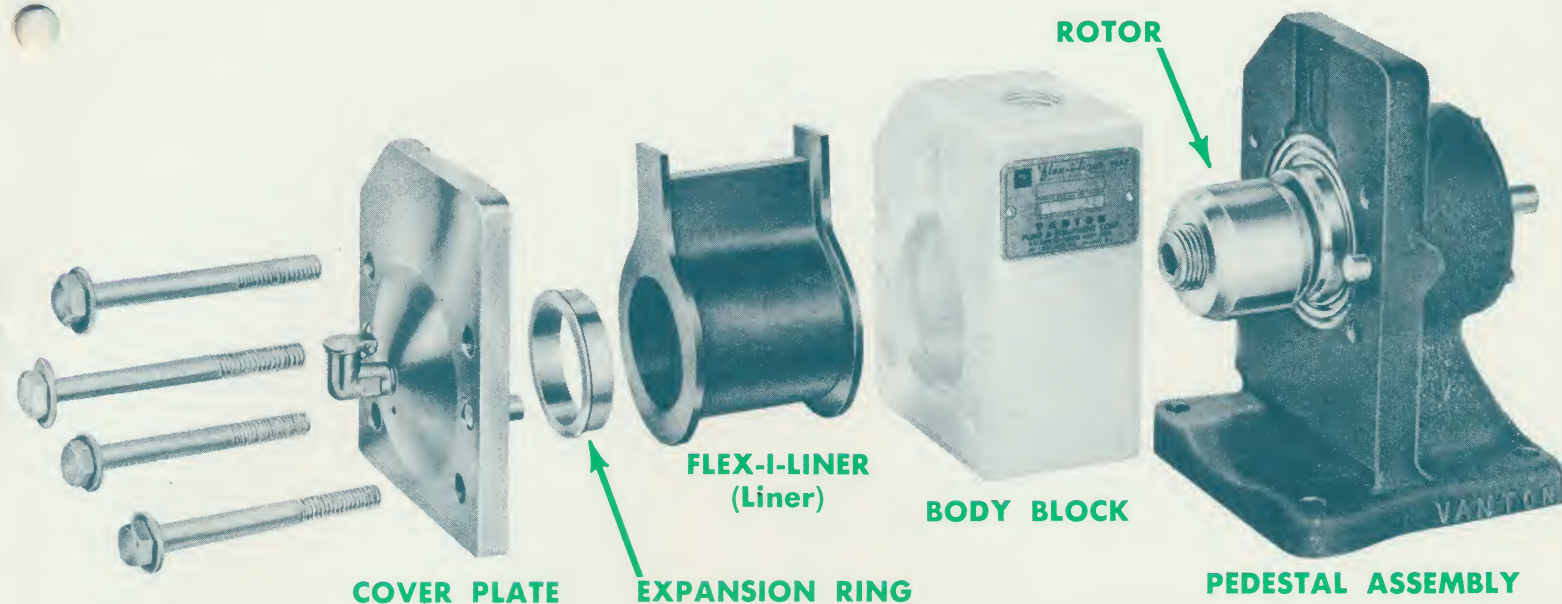
how it works:

Pumping is accomplished by a rotor, mounted on an eccentric shaft, which rotates within the liner creating a progressive squeegee action on the fluid trapped between the liner and the body block.

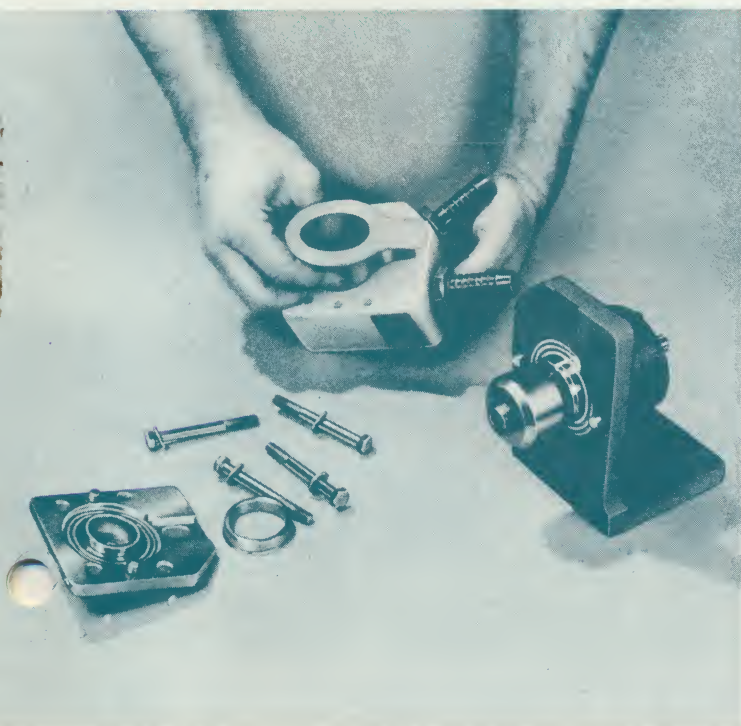
Shaft seals and packing are eliminated by isolating the fluid from all actuating mechanisms or rotating parts. In fact, the only two parts in contact with the fluids are the outer surface of the low cost pre-

cision molded flexible liner and the inner surface of the body block. Flanges on the flex-i-liner are pressed to the sides of the body block by concentric grooves on the pedestal assembly and the cover plate to isolate the fluid to the outside surface of the flex-i-liner while mechanical action is confined to the inside of the liner.

This pumping action is analogous to the squeezing of a tube filled with liquid.



simple to service:



With the external bearing design, only the inexpensive flex-i-liner will require replacement after long periods of service. This can be accomplished in a matter of minutes by an inexperienced operator requiring no special tools at the actual place of installation.

There is no need to remove the pump to a work bench for expensive or intricate servicing. Further, pump need not be removed from base plate, nor the precise alignment of shaft to motor disturbed. This saves hours, even days, of costly "down time." To disassemble the flex-i-liner pump, simply remove four bolts freeing the cover plate. Withdraw expansion ring from flex-i-liner. Slight rotation of pump shaft will separate the body block from pedestal and it too can then be removed. With this simple procedure, the flex-i-liner can be changed and the body block, expansion ring and cover plate replaced in short order. The pump is now ready for "good as new" performance.

The cantilever mounting, along with the fact that all bearings are fully protected, isolates maintenance in most instances to the above simple procedure of flex-i-liner replacement. Normally, when a flex-i-liner has failed, bearings are isolated from contact with fluid by a bearing guard between rotor and pedestal and by a plug on outer end of the rotor. Simplicity of overall design, provides for easy replacement of bearings or other necessary parts.

performance data:

LEGEND

— P.S.I.G. vs Capacity @ 1750 RPM

NOTE:

Pump characteristic curves show average performance data for water at room temperature. Slight differences may be encountered due to variations in Duro-meter hardness of flex-i-liner. Special materials such as Kel-F, Viton A, Hypalon and Compar may exhibit differences from stated data.

Performance will vary with materials of different viscosity and specific gravity.

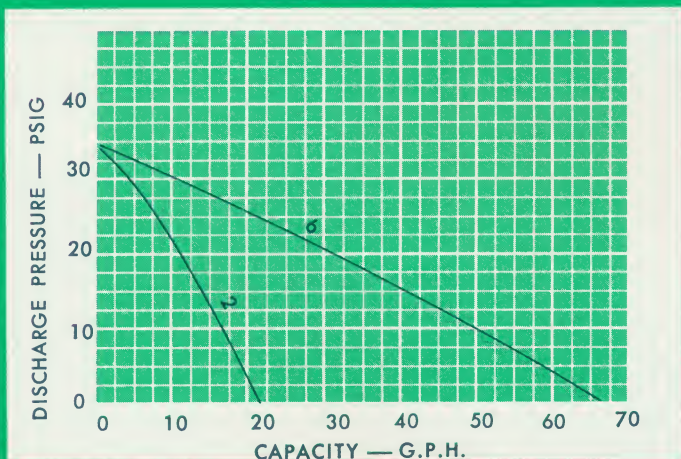
Pumps can deliver vacuums to 26" Hg.

SIZE	CAPACITY G.P.M. H ₂ O AT 70°F AT 0—P.S.I.	OPERATING PRESSURE RANGE P.S.I.G.		H.P.	R.P.M.	HOSE CONNEC- TIONS* O.D.
		INTER- MITTENT	CON- TINUOUS			
2	0.33	0-25	0-25	1/4	1750	3/4"
6	1.0	0-25	0-25	1/4	1750	3/4"
12	2.0	0-35	0-30	1/4	1750	3/4"
18	3.0	0-40	0-30	1/4	1750	3/4"
30	5.0	0-45	0-30	1/4	1750	1"
60A	10.0	0-50	0-30	1/2	1750	†
90	15.0	0-25	0-20	1	1200	1 1/2"
120	20.0	0-25	0-20	1	1200	1 1/2"
180	30.0	0-50	0-35	1-1 1/2	1750	2"
240	40.0	0-50	0-35	1-1 1/2	1750	2"

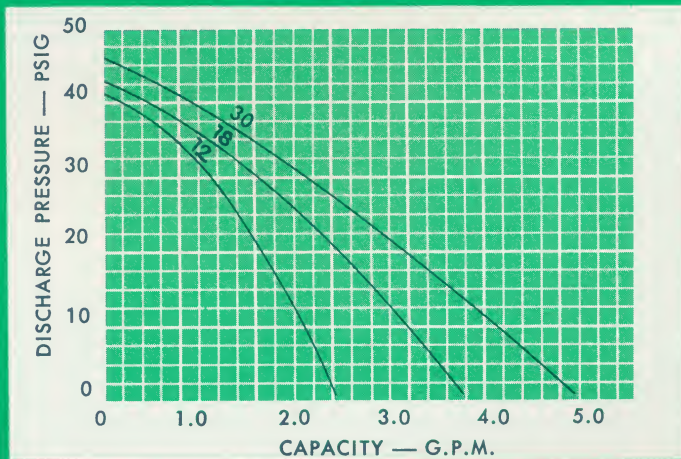
*Hose connections generally recommended.—Other types available.

† 1 1/4" suction, 1" discharge

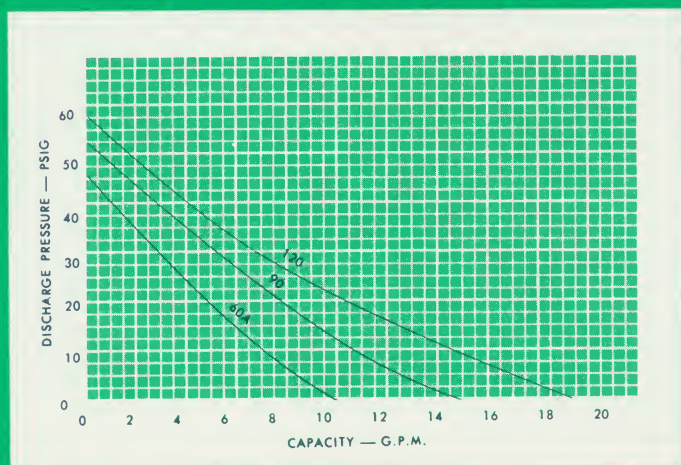
SIZES 2 - 6



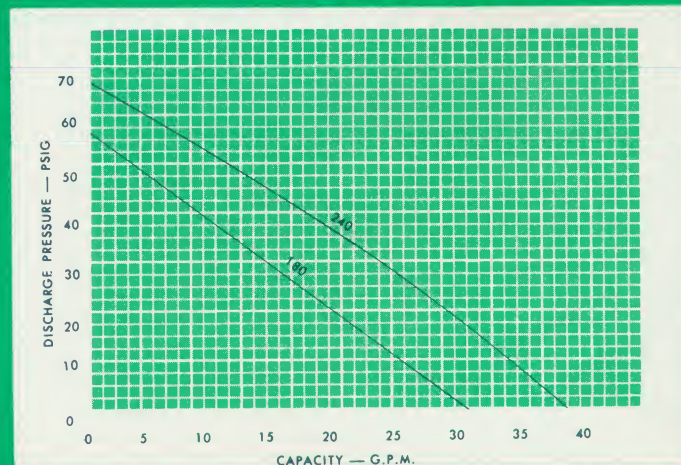
SIZES 12 - 18 - 30



SIZES 60A - 90 - 120



SIZES 180 - 240



DETAILED CURVES ON REQUEST

materials of construction:

Plastic or stainless steel for complete chemical resistance:

Simplicity of design affords fluid contact with only two basic parts, the flex-i-liner and pump body block. These parts are available in a wide range of plastic, synthetic rubber or stainless steel alloy materials of construction. By offering this diversity of materials, no compromise with chemical resistance of the pump is required. The best body block and flex-i-liner material can readily be selected for each application. Further, these two parts are interchangeable in various materials over broad size classifications. Thus a single pump unit with varied flex-i-liners and/or body block can be utilized for many varied services with minimum capital expenditure.

		MATERIAL	OPERATING TEMPERATURE RANGE	GENERAL CHEMICAL SERVICE
BODY BLOCK	"P" series	Polyethylene (Linear, High Temp.)	up to 185°F	Excellent for weak and strong acids; weak and strong alkalies; attacked by strong oxidizing acids and aromatic solvents.
	"PY" series	Polypropylene	up to 185°F	Excellent for weak and strong acids and alkalies. Excellent for many solvents.
	"B" series	Bakelite	up to 225°F	Excellent for weak acids and strong reducing and organic acids; excellent for weak alkalies and organic solvents; decomposed by oxidizing acids; attacked by strong alkalies.
	"T" series	Teflon	limited only by flex-i-liner	Excellent for weak and strong acids, weak and strong alkalies, and organic solvents; generally inert to chemical attack.
	"S" series	Stainless Steel	limited only by flex-i-liner	Good resistance to acids, alkalies and chemical salts; not satisfactory for chloride bearing compounds. Excellent for solvents and food product service. Excellent for Slurries.
	"M" series	Meehanite	limited only by flex-i-liner	Excellent for abrasive and erosive services; generally inert to alkaline solutions.
FLEX-I-LINER	Gum Rubber } Natural Rubber }		up to 165°F	Good resistance to weak and strong acids and alkalies; attacked by oxidizing agents; good resistance to oxygenated solvents as alcohols; swells in vegetable, mineral and animal oil. Excellent abrasion resistance.
	Buna N		up to 185°F intermittent to 200°F	Good resistance to weak and strong acids and alkalies; excellent resistance to aliphatic hydrocarbons; excellent resistance to petroleum oil, gasoline, mineral and vegetable oils. Excellent water swell resistance.
	Neoprene		up to 225°F	Excellent resistance to dilute acids; weak and strong alkalies; good resistance to concentrated acids; good resistance to oil and gasoline.
	Hypalon (Chlorosulfonated Polyethylene)		up to 210°F	Excellent resistance to dilute and concentrated acids, weak and strong alkalies. Exceptional resistance to strong oxidizing acids. Good resistance to concentrated mineral acids.
	Kel F Elastomer		up to 210°F	Excellent resistance to strong oxidizing acids, mineral acids, peroxides, alkalies, alcohols, aliphatic solvents and hydraulic fluids. Excellent heat resistance.
	Butyl		up to 225°F	Good resistance to corrosive chemicals. Outstanding resistance to dilute mineral acids. Excellent resistance to vegetable and mineral oils and solvents. Excellent heat resistance and low gas permeation.
	Viton A		up to 250°F	Excellent resistance to oils, solvents and missile fuels and most chemicals at elevated temperatures.
	Compar (Polyvinyl Alcohol)		up to 150°F	Extremely resistant to organic solvents; attacked by water, weak acids and alkalies.
	Nordel		up to 225°F	Resistant to weak acids most alkalies & ketones.

typical uses and recommended materials:

The Materials Selection Chart shown below indicates the recommended materials for Body Block and Flex-i-liner for specific chemical solutions. Conditions of service may change any formulated expectation concerning corrosion resistance. Some of the data is the result of laboratory tests under controlled conditions and may not offer a true indication of actual resistance in the pumping operation. Most data, however, is based on field results. Customer should consider previous experience with these materials with respect to specific applications.

In many cases more than one material is shown for an application. This is done to facilitate selection of one unit which may be called on to service different applications. Unless otherwise indicated data is given for service at room temperature.

When designations or concentrations are indicated they are maximum limiting factors.

A—Excellent B—Fair (Refer to Vantone) C—Not Applicable

FLUID	BODY BLOCK						FLEX-I-LINER						FLUID	BODY BLOCK						FLEX-I-LINER					
	B	P	Py	T	S	M								B	P	Py	T	S	M						
Acetic Acid	C	B	B	A	A	C	C	B	B	A	A	C	Lauric Acid	—	C	A	A	A	C	C	A	C	B	B	A
Alum	A	A	A	A	C	C	A	A	A	A	A	A	Lemon Oil	A	B	B	A	A	A	C	A	A	A	B	A
Aluminum Chloride	A	A	A	A	B	C	A	A	A	A	A	A	Lime Slurry	A	A	A	B	A	A	A	A	B	B	B	C
Aluminum Sulfate	A	A	A	A	B	C	A	A	A	A	A	A	Linseed Oil	A	C	A	A	A	—	C	A	A	A	A	A
Ammonium Acetate	—	A	A	A	A	A	C	A	A	A	A	A	Magnesium Chloride	A	A	A	A	B	C	A	A	A	A	A	A
Ammonium Hydroxide	C	A	A	A	A	A	A	A	A	A	A	A	Magnesium Hydroxide	C	A	A	A	A	A	A	A	A	A	A	A
Aqua Regia	C	C	A	A	C	C	C	C	C	B	C	A	Mercuric Chloride	—	A	A	A	C	C	C	C	C	B	A	B
Arsenic Acid	C	B	A	A	A	C	A	A	A	A	A	A	Methanol	A	A	A	A	A	A	A	A	A	A	A	B
Barium Carbonate	C	A	A	A	A	A	A	A	A	A	A	A	Mineral Oil	A	B	A	A	A	A	C	A	A	B	C	B
Beet Sugar Liquors	A	A	A	A	A	A	A	A	A	A	C	A	Naptha	C	C	C	A	A	A	C	C	B	C	B	A
Beer	A	A	A	A	A	A	A	A	C	A	A	A	Nickel Chloride	—	A	A	A	C	C	A	A	A	A	A	A
Benzene	A	C	B	A	A	A	C	C	C	C	C	A	Nickel Nitrate	A	A	A	A	A	C	A	A	A	A	A	A
Black Sulfate Liquor	—	A	A	A	—	—	A	A	A	A	—	A	Nitric Acid 70%	C	C	B	A	C	C	C	C	C	B	C	A
Boric Acid	A	A	A	A	A	C	A	A	A	A	A	A	Nitrobenzene	C	C	B	A	A	—	C	C	C	C	A	C
Bromic Acid	C	A	C	A	C	C	—	—	—	—	A	A	Oleic Acid	A	A	A	A	A	C	B	B	A	B	B	B
Butter	C	A	A	A	A	B	C	A	A	A	A	A	Olive Oil	A	C	B	A	A	A	C	C	A	A	C	A
Butyl Alcohol	A	B	A	A	A	A	C	A	A	A	A	A	Perchloric Acid 70%	C	A	A	A	C	C	C	C	C	C	C	A
Cadmium Cyanide	A	A	A	A	C	C	C	A	C	A	A	A	Perchloroethylene	C	C	C	A	A	C	C	C	C	C	C	A
Calcium Bisulfide	A	C	C	A	C	C	C	C	C	C	A	A	Phosphoric Acid	A	B	A	A	A	C	C	A	B	A	A	A
Calcium Chloride	A	A	A	A	A	B	A	A	A	A	A	A	Pickling Bath (H ₂ SO ₄ -HNO ₃)	C	A	A	A	C	C	C	B	C	A	B	A
Calcium Hypochlorite	C	A	A	A	C	C	C	C	C	A	A	B	Pickling Bath (HNO ₃ -HF)	C	A	A	A	C	C	C	B	C	A	B	A
Carbon Tetrachloride	C	C	C	A	A	A	C	C	C	C	C	A	Picric Acid	C	A	A	A	A	C	A	A	A	A	A	A
Castor Oil	A	A	A	A	A	A	B	A	B	A	A	A	Plating Solutions (Brass, Cadmium, Copper, Gold, Lead, Nickel, Rhodium, Silver, Tin, Zinc)	B	A	A	A	C	C	C	A	C	A	A	A
Chlorosulfonic Acid	C	C	C	A	A	C	C	C	C	C	C	C	Plating Solution (Chrome)	A	A	A	A	C	C	C	C	C	A	A	A
Chromic Acid (to 60%)	C	A	A	A	B	C	C	C	C	A	A	A	Potassium Dichromate	A	A	A	A	A	—	A	A	A	A	A	A
Citric Acid	A	A	A	A	A	—	A	A	C	A	A	A	Potassium Hydroxide	C	A	A	A	A	A	B	A	B	A	A	A
Coating Emulsions (Slurries)	A	B	B	B	A	A	A	A	B	B	A	B	Propyl Alcohol	A	A	A	A	A	A	A	A	A	A	A	A
Copper Chloride	A	A	A	A	C	C	A	A	A	A	A	A	Shortening (140°F)	A	C	B	A	A	A	C	B	A	B	C	A
Copper Cyanide	A	A	A	A	A	—	A	A	A	A	A	A	Sodium Carbonate	A	A	A	A	A	A	A	A	A	A	A	A
Cotton Seed Oil	A	A	A	A	A	A	A	A	A	A	A	A	Sodium Chloride	A	A	A	A	A	A	A	A	A	A	A	A
Creosote	A	C	C	A	A	—	C	C	A	C	C	A	Sodium Hydroxide	C	A	A	A	B	B	C	A	C	A	A	A
Cuprous Ammonium Chloride	A	A	A	A	—	—	—	A	—	A	A	A	Sodium Hypochlorite	C	A	A	A	C	C	C	B	C	A	A	B
Developer Solution	A	A	A	A	A	A	A	A	A	A	A	A	Sodium Thiosulfate	A	A	A	A	A	A	A	A	A	A	A	A
Diethyl Amine	C	C	A	A	A	A	C	C	C	C	A	A	Stannic Chloride	A	A	A	A	C	C	A	B	A	A	A	A
Distilled Water	A	A	A	A	B	C	A	A	A	A	A	A	Stannous Chloride	A	A	A	A	C	C	C	A	A	A	A	A
Ethylene Bromide	C	C	C	A	A	C	—	—	—	—	—	A	Stearic Acid	A	A	A	A	A	C	C	B	B	B	B	A
Ethylene Glycol	A	A	A	A	A	A	A	A	A	A	A	A	Sulfamic Acid	C	A	A	A	A	C	C	B	C	A	C	A
Ferric Chloride	A	A	A	A	C	C	A	A	B	A	A	A	Sulfuric Acid (to 40%)	C	B	A	A	C	C	C	A	C	A	C	A
Ferric Sulfate	A	A	A	A	C	C	A	A	A	A	A	A	Sulfuric Acid-Conc.	C	C	A	A	B	B	C	C	C	A	C	A
Fluoboric Acid	A	A	A	A	C	C	A	A	A	A	A	A	Sulfuric Acid—Fuming (Oleum)	C	C	C	A	B	B	C	C	C	A	C	A
Fluosilicic Acid	A	A	A	A	B	B	A	A	B	A	B	B	Tannic Acid	A	A	A	A	A	C	A	A	C	A	C	A
Formaldehyde (to 40%)	C	C	A	A	B	C	A	A	A	A	C	A	Tartaric Acid	A	A	A	A	A	C	A	A	C	A	C	A
Formic Acid	—	A	A	A	A	C	C	A	C	A	A	C	Tile Glaze Slurry	A	B	B	B	A	A	A	A	C	B	B	B
Freon (11, 21, 22)	—	—	A	A	A	—	C	A	A	C	A	A	Titanium Tetrachloride	A	A	A	A	C	C	C	C	C	A	C	A
Freon 12	—	—	A	A	A	—	C	A	A	C	A	A	Tributyl Phosphate	—	C	A	A	A	C	—	—	—	—	—	—
Gasoline	C	C	B	A	A	A	C	C	A	C	C	A	Trichlorethylene	C	C	C	A	A	A	C	C	C	C	C	A
Gelatin	A	A	A	A	A	A	A	A	A	A	A	A	Triethanolamine	C	C	A	A	A	A	C	A	C	A	A	C
Glucose	A	A	A	A	A	B	A	A	A	A	A	A	Trinitrotoluene	C	C	A	A	A	C	C	A	C	B	C	A
Glycerine	A	A	A	A	A	A	A	A	A	A	A	A	Tung Oil	C	A	A	A	A	A	C	A	A	A	B	A
Heptane	A	C	C	A	A	A	A	A	A	A	A	A	Turpentine	—	C	B	A	A	A	C	C	C	C	C	A
Hydrobromic Acid	—	B	A	A	C	C	C	C	C	A	A	A	Zinc Chloride	A	A	A	A	C	C	A	A	A	A	A	A
Hydrochloric Acid	A	A	A	A	C	C	C	C	C	A	A	A	Zinc Sulfate	A	A	A	A	A	C	A	A	A	A	A	A
Hydrofluoric Acid 70%	A	—	A	A	C	C	C	C	C	B	C	A													
Hydrogen Peroxide 80%	C	—	A	A	A	B	C	C	C	A	A	A													
Kerosene	C	C	B	A	A	B	C	B	A	C	C	A													
Lactic Acid	A	A	A	A	A	C	B	A	B	A	A	A													
Lard	A	C	B	A	A	A	C	B	A	B	C	A													

NOTE: For applications not shown above, consult Vantone Engineering Department.

VANTON

flex-i-liner PUMPS

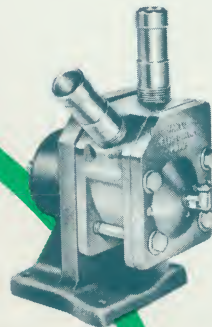
All Vanton flex-i-liner Pumps incorporate the basic design features described earlier. The following gives a description of the pump types available to meet the widest range of applications.



PLASTIC

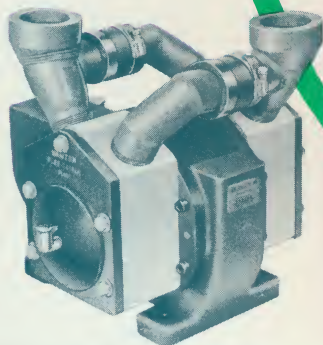
Heavy duty plastic pumps for general chemical service. Suitable for corrosive fluids, abrasive slurries and solutions which must be maintained free from contamination. Capacities 1/3-20 GPM. Available in "P" Series Polyethylene, "N" Series Buna N, "B" Series Bakelite and "T" Series Teflon Body Blocks with wide assortment of rubber, synthetic and plastic flex-i-liners.

Also available in close coupled design for intermittent service. Capacity 1/3-10 GPM.



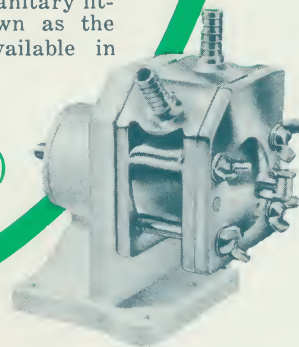
FLEX-ALLOY (Stainless Steel)

The Flex-Alloy pump offers a stainless steel housing for those applications where stainless steel is required throughout a system. Capacity 1/3-40 GPM. Designated "S" Series, stainless steel body block, it is available with Type 316 or 304 alloy. Special alloys on request.



DUPLEX

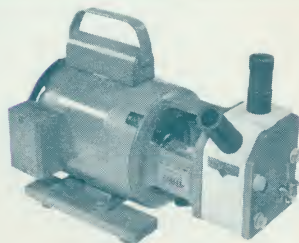
A double stage heavy duty pump with two fluid cavities, each activated by an eccentric 180° in opposition producing a steady pulseless flow. Fluid end intakes and discharges are manifolded to produce common suction and exit. Capacities 20-40 GPM. Available with same materials of construction as single stage units. Body blocks and flex-i-liners are interchangeable with 15 and 20 GPM sizes.



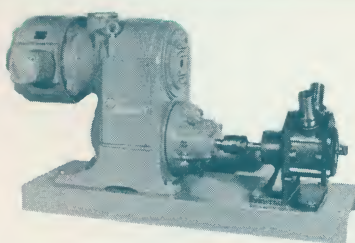
SANIFLEX (100% Sanitary)

A heavy duty sanitary pump unit meeting the requirements of Health Department authorities. Pump is furnished with polished stainless steel body block. There are no internal threads within the body. Wing bolts are supplied for ready and quick hand disassembly. Sanitary fittings are provided. Known as the "SAN" Series, it is available in sizes 1/3-20 GPM.

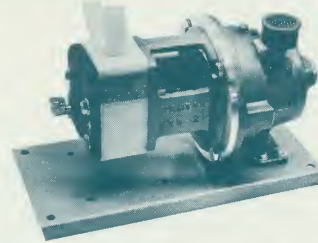
TYPICAL PUMP AND MOTOR ASSEMBLIES



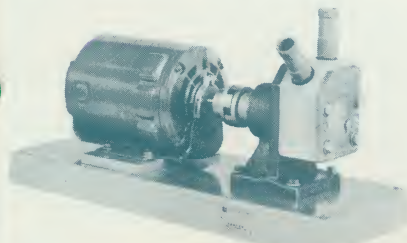
PORTABLE CLOSE-COUPLED ELECTRIC MOTOR DRIVE



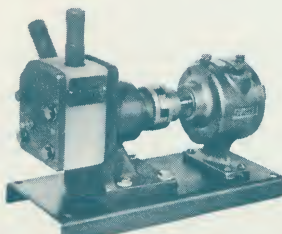
VARIABLE-SPEED ELECTRIC MOTOR DRIVE



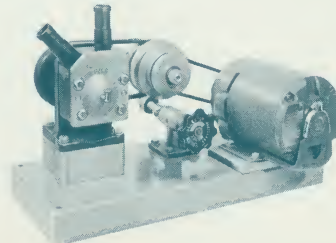
CLOSE-COUPLED AIR MOTOR DRIVE



PEDESTAL MOUNTED ELECTRIC MOTOR DRIVE



PEDESTAL MOUNTED AIR MOTOR DRIVE



VARIABLE PITCH PULLEY DRIVE

typical industrial applications

CHEMICAL:

For handling extremely corrosive and hazardous acids, alkalis, alcohols, solvents, as well as abrasive slurries.

PHARMACEUTICAL:

For transfer of biological solutions, distilled water and antibiotics without contamination.

PLATING:

For recirculating corrosive plating solutions, as well as precious metal solutions without the possibility of leakage.

ELECTRONIC:

For pumping corrosive etch chemicals as ferric chloride and chromic acid in printed circuit operation and handling cleaning acids in TV tube production.

ATOMIC ENERGY:

Used for transfer of corrosive and radioactive contaminated solutions without danger of leakage.

BATTERY:

For transfer of sulfuric acid in battery production or filling of acid in shipping containers.

FILM AND PHOTOGRAPHIC:

For pumping corrosive developing and fixing solutions without contamination.

FOOD:

For handling such products as raw eggs, milk, shortening, tuna fish oils and ice cream cone batter in accordance with sanitary codes allowing quick tear down and steam sterilization.

GLASS AND MIRRORS:

For pumping silver glass backing fluids.

PAPER:

For transfer of paper coating emulsions and bleach compounds.

PRINTING:

For handling etch fluids in production of roto-gravure plates.

SEWAGE TREATMENT:

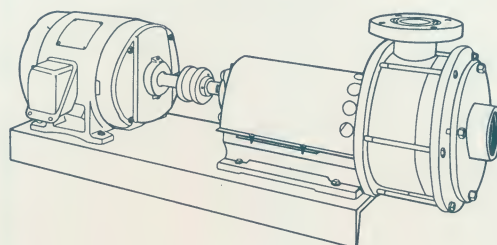
For controlled feeding of ferric chloride and transfer of lime solutions.

AUTOMOTIVE AND AIRCRAFT:

Used to pump corrosive soldering flux, pickling acids as well as plating solutions.

GOVERNMENT AND MILITARY:

Pumps meet rigid military specifications of numerous U. S. Procurement agencies with regard to design features, materials of construction and "on board" shock tests.



Chem-Gard Centrifugal Pumps
Polypropylene, PVC or Kynar Construction

The Vanton Chem-Gard Series of Plastic Centrifugal Pumps embodies the basic design and physical configurations dictated for efficient, heavy duty fluid transfer pumps. But beyond the point of basics, there are major departures in the use of corrosion resistant materials, design and construction of important components. The result is a line of pumps of unique characteristics unlike any other centrifugal pumping equipment now in use for the conveyance of chemicals, pharmaceuticals and other fluids which require protection from metallic corrosion and/or contamination.

Chem-Gard heavy duty plastic centrifugal pumps are equipped with four interchangeable heads rated at 200, 300, 800 and 1,200 G.P.H. at discharge heads to 170 feet. One pedestal is common to the entire range of pump heads. This approach in design allows the user to stock a minimum number of spare parts to service a complete range of Chem-Gard pumps resulting in lowest possible maintenance costs.



Pressure Gauge Isolator/Activator

This plastic cylinder, which contains two chambers, separated by a molded plastic diaphragm, permits the direct reading pressure gauge to be isolated from direct contact with corrosive fluids. As a result brass or other inexpensive gauges may be substituted for the otherwise required stainless or alloy unit.

Chem-Gard Fluid Surge Dampeners

Engineered to absorb fluid shock which would normally be transmitted to sensitive accessory equipment. For corrosion free service the units are fabricated in PVC, Polypropylene, and Penton. Standard sizes range from 1/4" through 1 1/2" NPT.



Chem-Gard Strainers

Vanton PVC and Polypropylene strainers are designed to be installed in pipelines or attached directly to processing equipment. The primary function of the unit is to trap and hold foreign particles which would be detrimental in a flow system. Available in sizes 1/2" thru 3" with 5 to 40 mesh strainer elements.

"Flex-Plug" Plastic Valves

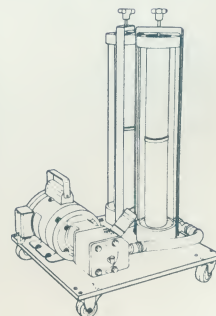
Vanton "Flex-Plug" valves combine the straight through flow, no pressure drop characteristics of a gate valve with the throttling characteristics of a globe. Available in PVC, Polypropylene construction. Sizes range from 1/2" thru 2".



Chem-Gard Pump Filter Units

Vanton all plastic filters combined with Vanton seal-less pumps have eliminated all metallic contact from the fluid area assuring complete corrosive protection to most chemical solutions. The filter features a simple positive plastic adjusting nut built into the head which maintains constant pressure on the replaceable polypropylene cartridge element eliminating the possibility of "blow by". The yoke design allows for rapid take apart or assembly without the need for any tools. The head or cap is the only piece that is removed from the entire unit which allows for the polypropylene cartridge to be replaced without the necessity of draining the entire system. The case is permanently sealed to the base and for added protection a gasket is sealed for life between the two pieces. All units are supplied with built in air bleed valves.

Engineered and designed for corrosive duties Vanton's all plastic pump-filter systems offer flows from 90 to 5000 GPH with filtration from 1 to 200 microns.



VANTON PUMP & EQUIPMENT CORP.

201 Sweetland Ave. • Hillside, New Jersey 07205 • (201) 926-2435

EUROPEAN SALES AND SERVICE

COOPER ALLOY INTERNATIONAL, S. A. • RUE ST. PIERRE ET GRAND PLACE • FRIBOURG, SWITZERLAND

ENGINEERED PLASTIC PRODUCTS FOR FLUID HANDLING